

SPC AC 211613

DAY 1 CONVECTIVE OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
1113 AM CDT WED JUL 21 2010

VALID 211630Z - 221200Z

...THERE IS A MDT RISK OF SVR TSTMS THIS AFTERNOON AND EVENING
ACROSS PORTIONS OF NORTHERN PA...SOUTHERN AND EASTERN NY...NORTHERN
NJ...CT...WESTERN MA...VT...AND NH...

...THERE IS A SLGT RISK OF SVR TSTMS FROM NORTHERN NC/VA NORTHWARD
ACROSS MOST OF PA/NY/NJ AND NEW ENGLAND...

...NORTHEAST UNITED STATES...
BROAD CYCLONIC FLOW IS IN PLACE TODAY OVER THE NORTHEAST
STATES...WITH 12Z UPPER AIR ANALYSIS SHOWING COOL MID LEVEL
TEMPERATURES AND STRONG WESTERLY FLOW ALOFT OVER SPREADING NY/PA/NJ
AND NEW ENGLAND. STRONG HEATING TODAY WILL COMBINE WITH DEWPOINTS
IN THE 60S TO LOWER 70S AND YIELD AFTERNOON MUCAPE VALUES OF
1500-2500 J/KG. ALL MODEL GUIDANCE SUGGESTS WIDESPREAD THUNDERSTORM
ACTIVITY WILL AFFECT THIS REGION...WITH THE POTENTIAL FOR NUMEROUS
DISCRETE CELLS INCLUDING A FEW SUPERCELLS. SEVERE WIND GUSTS ARE
THE MAIN THREAT...WITH A RISK OF RATHER WIDESPREAD COVERAGE OF
DAMAGING WINDS REPORTS ACROSS THE MODERATE RISK AREA.
OTHERWISE...LARGE HAIL AND A FEW TORNADOES ARE ALSO POSSIBLE. THE
RISK MAY PERSIST FOR SEVERAL HOURS AFTER SUNSET AS UPPER TROUGH
MOVES ACROSS REGION.

...MID ATLANTIC INTO CAROLINAS...
SIMILAR TO LAST SEVERAL DAYS...STRONG DAYTIME HEATING WILL OCCUR
TODAY ALONG AND EAST OF THE APPALACHIANS FROM WESTERN SC/NC INTO VA.
SCATTERED THUNDERSTORMS WILL MOVE OUT OF THE HIGHER TERRAIN AND
INTO A VERY MOIST AND UNSTABLE AIR MASS. DESPITE RATHER WEAK FLOW
ALOFT...THE STRONGER STORMS WILL BE CAPABLE OF LOCALLY DAMAGING
DOWNBURST WINDS.

...MID MS VALLEY/CENTRAL PLAINS THROUGH TONIGHT...
A SERIES OF SUBTLE MIDDLELEVEL VORTICITY CENTERS WILL TRANSLATE
NEWD/EWD FROM UT/CO ACROSS KS/NEB TO MO ALONG THE SRN FRINGE OF THE
WLYS AND SUPPORT AFTERNOON THUNDERSTORM DEVELOPMENT IN THE AREA OF
WEAK UPSLOPE FLOW ACROSS NE CO. FARTHER E...LOW-LEVEL WAA IS
SUPPORTING AN ONGOING THUNDERSTORM CLUSTER ACROSS NRN KS. THIS
CONVECTION IS EXPECTED TO EXPAND NWD DURING THE DAY INTO ERN NEB
WITH AN ASSOCIATED THREAT FOR DAMAGING WINDS/HAIL... ESPECIALLY
ALONG THE SRN FLANK OF THE CLUSTER WHERE INSTABILITY WILL BE
GREATEST. LATER THIS EVENING INTO TONIGHT...CONVECTION IS EXPECTED
TO EVOLVE INTO ANOTHER MCS ON THE NOSE OF A STRENGTHENING LLJ FROM
ERN NEB INTO IA/SW MN.

ANOTHER CLUSTER OR TWO OF THUNDERSTORMS WILL BE POSSIBLE THIS
AFTERNOON ALONG THE RESIDUAL COMPOSITE OUTFLOW BOUNDARY ACROSS
CENTRAL MO...IN ADVANCE OF A REMNANT MCV WHICH IS DRIFTING EWD
ACROSS NORTHEAST KS. A FEW DAMAGING GUSTS WILL BE POSSIBLE WITH
THESE MULTICELL STORMS IN A REGION OF MARGINAL DEEP-LAYER SHEAR.

...NRN ROCKIES/NRN PLAINS THROUGH TONIGHT...
ONGOING CONVECTION ACROSS NW SD/SW ND APPEARS TO BE ASSOCIATED WITH
LOW-LEVEL WAA AND AN EMBEDDED MID-UPPER SPEED MAX MOVING EWD FROM
MT. THE CONVECTION MAY PERSIST THROUGH MUCH OF THE AFTERNOON ACROSS
NRN SD INTO SRN ND WITH A MARGINAL RISK FOR DAMAGING WINDS/HAIL.
OTHERWISE...ADDITIONAL HIGH-BASED THUNDERSTORM DEVELOPMENT IS
EXPECTED THIS AFTERNOON OVER THE HIGH TERRAIN OF ID/SW MT ON THE NW
EDGE OF THE MIDDLELEVEL MOISTURE PLUME EMANATING FROM THE GREAT
BASIN...AND IN ADVANCE OF A MIDDLELEVEL TROUGH PROGRESSING EWD FROM
OREGON. DEEP-LAYER VERTICAL SHEAR WILL BE FAVORABLE FOR ORGANIZED
CLUSTERS/SUPERCCELLS CAPABLE OF PRODUCING A FEW DAMAGING GUSTS AND
ISOLATED LARGE HAIL. THE AFTERNOON CONVECTION MAY ALSO EVOLVE INTO
A SMALL CLUSTER THAT COULD PERSIST OVERNIGHT WHILE SPREADING EWD
OVER S CENTRAL/SE MT.